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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20 and 22-30</u> is/are rejected.

7)☒ Claim(s) <u>21</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Elgebaly et al.

(US Patent 7272650 B2).

3.   In regards to claim 1, Elgebaly shows in figure 3 a session initiation procedure

between a client internal to (SIP client on the interior of the NAT device) and a client

external (a second SIP client located on the exterior of the NAT device) to the NAT

device (a NAT device).

The internal host sends a registration request (300) and listens (302) on an

internal address and port. The registration request is examined (304) by a registration

server (a proxy server). The registration server examines the internal address

embedded within the registration to determine (306) if the address is routable (see

column 3, lines 65-67).

If the address is routable, then the registration server registers (308) the address,

port and identity alias as usual. If however the address is not routable, then the

registration server identifies (310) the origin address and port associated with the

network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7) (maintain registration information relating to the first SIP client and the NAT device).

An external endpoint trying to call (314) the internal endpoint (wherein the second SIP client is able to initiate contact with the first SIP client) resolves the internal endpoint's identity alias as the identified (310) origin address and port of the NAT device. The internal host is listening (302) on the ports that are mapped to the external ports registered (312) by the registration server. When the NAT device receives (316) the incoming call (wherein the communication session is established by traversing the NAT device), which is routed through the registration server (establish a communication session using the proxy server and the registration information maintained thereon), the NAT device maps (318) the call from the external endpoint to the internal endpoint (see column 4, lines 13-16).

In regards to claims 2 and 3, the internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server. The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

In regards to claim 4, the internal host sends a registration request (300) and listens (302) on an internal address and port. Furthermore, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual.

If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7).

In regards to claim 5, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT (some of the registration information is provided to the proxy server by the NAT device); and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7).

In further regards, in the background section (relating to network architecture of figure 1), Elgebaly reveals that a NAT translates source IP address and ports of outgoing network traffic to map the traffic to an external of public address of an access point and a unique port (wherein upon the first SIP client forwarding some of the registration information to the proxy server via the NAT device, the NAT device creates a binding for the first SIP client) (see column 1, lines 38-41).

In yet further regards, When the NAT device receives (316) the incoming call, which is routed through the registration server, the NAT device maps (318) the call from the external endpoint to the internal endpoint (wherein the binding and the registration information are used to allow the second SIP client to initiate contact with

the first SIP client by traversing the proxy server and the NAT device) (see column 4,
lines 13-16).

In regards to claim 6, the registration server can be a gatekeeper (see column 3,
line 65).

In regards to claim 7, Elgebaly shows in figure 3 a session initiation procedure
between a client internal to (SIP client on the interior of the NAT device) and a client
external (a second SIP client located on the exterior of the NAT device) to the NAT
device (a NAT device).

The internal host sends a registration request (300) and listens (302) on an
internal address and port. The registration request is examined (304) by a registration
server (a proxy server). The registration server examines the internal address
embedded within the registration to determine (306) if the address is routable (see
column 3, lines 65-67).

If the address is routable, then the registration server registers (308) the address,
port and identity alias as usual. If however the address is not routable, then the
registration server identifies (310) the origin address and port associated with the
network traffic packets encoding the protocol data, as this corresponds to the result of
the NAT, and register (312) the internal host at the identified origin address with the
identifying alias (see column 4, lines 1-7) (maintain registration information relating to
the first SIP client and the NAT device).

An external endpoint trying to call (314) the internal endpoint (wherein the
second SIP client is able to initiate contact with the first SIP client) resolves the internal

endpoint's identity alias as the identified (310) origin address and port of the NAT

device. The internal host is listening (302) on the ports that are mapped to the external

ports registered (312) by the registration server. When the NAT device receives (316)

the incoming call (wherein the communication session is established by traversing the

NAT device), which is routed through the registration server (establish a

communication session using the proxy server and the registration information

maintained thereon), the NAT device maps (318) the call from the external endpoint to

the internal endpoint (see column 4, lines 13-16).

In regards to claims 8 and 9, the internal host sends a registration request (300)

and listens (302) on an internal address and port. The registration request is examined

(304) by a registration server. The registration server examines the internal address

embedded within the registration to determine (306) if the address is routable (see

column 3, lines 65-67).

In regards to claim 10, the internal host sends a registration request (300) and

listens (302) on an internal address and port. Furthermore, if the address is routable,

then the registration server registers (308) the address, port and identity alias as usual.

If however the address is not routable, then the registration server identifies (310) the

origin address and port associated with the network traffic packets encoding the

protocol data, as this corresponds to the result of the NAT, and register (312) the

internal host at the identified origin address with the identifying alias (see column 4,

lines 1-7).

In regards to claim 11, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT (some of the registration information is provided to the proxy server by the NAT device), and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7).

In further regards, in the background section (relating to network architecture of figure 1), Elgebaly reveals that a NAT translates source IP address and ports of outgoing network traffic to map the traffic to an external of public address of an access point and a unique port (wherein upon the first SIP client forwarding some of the registration information to the proxy server via the NAT device, the NAT device creates a binding for the first SIP client) (see column 1, lines 38-41).

In yet further regards, When the NAT device receives (316) the incoming call, which is routed through the registration server, the NAT device maps (318) the call from the external endpoint to the internal endpoint (wherein the binding and the registration information are used to allow the second SIP client to initiate contact with the first SIP client by traversing the proxy server and the NAT device) (see column 4, lines 13-16).

In regards to claim 13, the registration server can be a gatekeeper (see column 3, line 65).

In regards to claim 14, Elgebaly shows in figure 3 a session initiation procedure between a client internal to (a first SIP client on the interior of the NAT device) and a client external (a second SIP client located on the exterior of the NAT device) to the NAT device (a NAT device).

The internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server (a proxy server). The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

If the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7) (a look up table configured to store registration information relating to the first SIP client and the NAT device).

An external endpoint trying to call (314) the internal endpoint (a control logic configured to use the registration information to allow the second SIP client to initiate contact with the first SIP client) resolves the internal endpoint's identity alias as the identified (310) origin address and port of the NAT device. The internal host is listening (302) on the ports that are mapped to the external ports registered (312) by the registration server. When the NAT device receives (316) the incoming call

(establishing a communication session with the first SIP client and wherein the second SIP client is able to traverse the NAT device via the proxy server to establish the communication session with the first SIP client), which is routed through the registration server, the NAT device maps (318) the call from the external endpoint to the internal endpoint (see column 4, lines 13-16).

In regards to claim 16, the internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server (a proxy server). The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

In regards to claim 17, the internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server. The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

In regards to claim 18, the internal host sends a registration request (300) and listens (302) on an internal address and port. Furthermore, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the

internal host at the identified origin address with the identifying alias (see column 4,

lines 1-7).

In regards to claim 19, the registration server can be a gatekeeper (see column

3, line 65).

Claim Rejections - 35 USC § 103

4.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.　　Claims 12, 15, 20 and 22-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Elgebaly et al. (US Patent 7272650 B2), in view of Caslin et al. (US

Patent 7197560 B2).

In regards to claim 12, Elgebaly teaches all the limitations of parent claims 7 and

11. Elgebaly fails to teach specifically receiving a SIP INVITE at the proxy server to

identify the NAT and forward the INVITE to the NAT device, using the binding

information to forward the SIP INVITE command to the first SIP client and conducting

direct communication between the first and the second client through the NAT upon the

first SIP client accepting the SIP INVITE.

Caslin however teaches the above-mentioned limitations. Figure 2 illustrates an

interaction between a proxy 230 and a location server 240 where user A 210 requests

to communicate with user B 220. User A sends an SIP INVITE describing the request

to proxy 113 (see column 8, lines 26-28) and the proxy server forwards a request to

location server 240 to retrieve one or more contacts at which USER B can be reached

(see column 8, lines 35-37). The location server subsequently, sends a reply back to

the proxy. Once user B is located, the INVITE is forwarded to User B and after

configuration of session parameters, communication can begin (see column 8, lines 60-

68).

Therefore, it would have been obvious to one skilled in the art at the time the

invention was made to combine the exchange of SIP INVITE as taught by Caslin into

the process of communications between SIP clients using a NAT as taught by Elgebaly.

The proper motivation to do so would be to allow for message exchange with the using

a fraud monitoring features as supported by Caslin.

In regards to claim 15, Elgebaly teaches all the limitations of parent claim 14.

Elgebaly fails to teach specifically receiving a SIP INVITE at the proxy server to identify

the NAT and forward the INVITE to the NAT device, using the binding information to

forward the SIP INVITE command to the first SIP client and conducting direct

communication between the first and the second client through the NAT upon the first

SIP client accepting the SIP INVITE.

Caslin however teaches the above-mentioned limitations. Figure 2 illustrates an

interaction between a proxy 230 and a location server 240 where user A 210 requests

to communicate with user B 220. User A sends an SIP INVITE describing the request

to proxy 113 (see column 8, lines 26-28) and the proxy server forwards a request to

location server 240 to retrieve one or more contacts at which USER B can be reached

(see column 8, lines 35-37). The location server subsequently, sends a reply back to the proxy. Once user B is located, the INVITE is forwarded to User B and after configuration of session parameters, communication can begin (see column 8, lines 60-68).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the exchange of SIP INVITE as taught by Caslin into the process of communications between SIP clients using a NAT as taught by Elgebaly. The proper motivation to do so would be to allow for message exchange with the using a fraud monitoring features as supported by Caslin.

6.   In regards to claim 20, Elgebaly shows in figure 3 a session initiation procedure between a client internal to (SIP client on the interior of the NAT device) and a client external (a second SIP client located on the exterior of the NAT device) to the NAT device (a NAT device).

The internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server (a proxy server). The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

If the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the

network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7) (maintain registration information relating to the first SIP client and the NAT device).

An external endpoint trying to call (314) the internal endpoint (wherein the second SIP client is able to initiate contact with the first SIP client) resolves the internal endpoint's identity alias as the identified (310) origin address and port of the NAT device. The internal host is listening (302) on the ports that are mapped to the external ports registered (312) by the registration server. When the NAT device receives (316) the incoming call (wherein the communication session is established by traversing the NAT device), which is routed through the registration server (establish a communication session using the proxy server and the registration information maintained thereon), the NAT device maps (318) the call from the external endpoint to the internal endpoint (see column 4, lines 13-16).

In further regards to claim 20, Elgebaly fails to teach specifically contacting the second client by forwarding the SIP INVITE from the proxy server to the second client, causing a new binding to be created.

Caslin however teaches the above-mentioned limitations. Figure 2 illustrates an interaction between a proxy 230 and a location server 240 where user A 210 requests to communicate with user B 220. User A sends an SIP INVITE describing the request to proxy 113 (see column 8, lines 26-28) and the proxy server forwards a request to location server 240 to retrieve one or more contacts at which USER B can be reached

(see column 8, lines 35-37). The location server subsequently, sends a reply back to the proxy. Once user B is located, the INVITE is forwarded to User B and after configuration of session parameters, communication can begin (see column 8, lines 60-68).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the exchange of SIP INVITE as taught by Caslin into the process of communications between SIP clients using a NAT as taught by Elgebaly. The proper motivation to do so would be to allow for message exchange with the using a fraud monitoring features as supported by Caslin.

In regards to claims 22 and 23, the internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server. The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

In regards to claim 24, the internal host sends a registration request (300) and listens (302) on an internal address and port. Furthermore, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the

internal host at the identified origin address with the identifying alias (see column 4,

lines 1-7).

In regards to claim 25, the registration server can be a gatekeeper (see column

3, line 65).

7.   In regards to claim 26, Elgebaly shows in figure 3 a session initiation procedure

between a client internal to (SIP client on the interior of the NAT device) and a client ·

external (a second SIP client located on the exterior of the NAT device) to the NAT

device (a NAT device).

The internal host sends a registration request (300) and listens (302) on an

internal address and port. The registration request is examined (304) by a registration

server (a proxy server). The registration server examines the internal address

embedded within the registration to determine (306) if the address is routable (see

column 3, lines 65-67).

If the address is routable, then the registration server registers (308) the address,

port and identity alias as usual. If however the address is not routable, then the

registration server identifies (310) the origin address and port associated with the

network traffic packets encoding the protocol data, as this corresponds to the result of

the NAT, and register (312) the internal host at the identified origin address with the

identifying alias (see column 4, lines 1-7) (maintain registration information relating to

the first SIP client and the NAT device).

An external endpoint trying to call (314) the internal endpoint (wherein the second SIP client is able to initiate contact with the first SIP client) resolves the internal endpoint's identity alias as the identified (310) origin address and port of the NAT device. The internal host is listening (302) on the ports that are mapped to the external ports registered (312) by the registration server. When the NAT device receives (316) the incoming call (wherein the communication session is established by traversing the NAT device), which is routed through the registration server (establish a communication session using the proxy server and the registration information maintained thereon), the NAT device maps (318) the call from the external endpoint to the internal endpoint (see column 4, lines 13-16).

In further regards to claim 26, Elgebaly fails to teach specifically receiving a SIP INVITE at the proxy server to identify the NAT and forward the INVITE to the NAT device, using the binding information to forward the SIP INVITE command to the first SIP client and conducting direct communication between the first and the second client through the NAT upon the first SIP client accepting the SIP INVITE.

Caslin however teaches the above-mentioned limitations. Figure 2 illustrates an interaction between a proxy 230 and a location server 240 where user A 210 requests to communicate with user B 220. User A sends an SIP INVITE describing the request to proxy 113 (see column 8, lines 26-28) and the proxy server forwards a request to location server 240 to retrieve one or more contacts at which USER B can be reached (see column 8, lines 35-37). The location server subsequently, sends a reply back to the proxy. Once user B is located, the INVITE is forwarded to User B and after

configuration of session parameters, communication can begin (see column 8, lines 60-68).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the exchange of SIP INVITE as taught by Caslin into the process of communications between SIP clients using a NAT as taught by Elgebaly. The proper motivation to do so would be to allow for message exchange with the using a fraud monitoring features as supported by Caslin.

In regards to claims 27 and 28, the internal host sends a registration request (300) and listens (302) on an internal address and port. The registration request is examined (304) by a registration server. The registration server examines the internal address embedded within the registration to determine (306) if the address is routable (see column 3, lines 65-67).

In regards to claim 29, the internal host sends a registration request (300) and listens (302) on an internal address and port. Furthermore, if the address is routable, then the registration server registers (308) the address, port and identity alias as usual. If however the address is not routable, then the registration server identifies (310) the origin address and port associated with the network traffic packets encoding the protocol data, as this corresponds to the result of the NAT, and register (312) the internal host at the identified origin address with the identifying alias (see column 4, lines 1-7).

In regards to claim 30, the registration server can be a gatekeeper (see column 3, line 65).

Conclusion

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JPP 11/26/07
Jay P. Patel
Examiner
Art Unit 2619

EDAN ORGAD
SUPERVISORY PATENT EXAMINER